

IN THE SPECIFICATION

The paragraph beginning at page 6, line 5 is amended as follows:

Figure 1C shows the cathode tip 101 with the implantation 118 being conforming to the entire surface of cathode tip 101. This implantation 118 enhances the releasing of electrons without the need to increase the strength of the electric field. However, in one embodiment, electron emission is further enhanced by using the implantation 118 with an increase in the strength of the electric field.